August 25, 2010

Mary Nichols, Chairman
James Goldstene, Executive Officer
California Air Resources Board
1001 "I" Street
P.O. Box 2815
Sacramento, CA 95812

RE: AB32 Environmental Justice Advisory Committee comments on the Proposed Screening Method for Low-Income Communities Highly Impacted by Air Pollution for AB 32 Assessments

Dear Chairman Nichols and Mr. Goldstene:

On behalf of the AB 32 Environmental Justice Advisory Committee (EJAC) we are writing to highlight our concerns and offer recommendations related to the proposed screening method for low-income communities highly impacted by air pollution for AB 32 assessments (screening method). We commend the staff for their efforts to develop a useful tool for identifying communities highly impacted by air pollution. However, we have serious concerns regarding the screening method and feel that it lacks many of the strengths found in the methodology developed by Dr.'s Pastor, Morello-Frosch and Sadd (EJ Research Team).

It is unclear to the EJAC why ARB is developing a new methodology rather than moving forward with the methodology developed by the EJ Research Team. This seems both economically and academically inefficient. The EJ Research Team's methodology represents several years of work from academic leaders in this field, it has been thoroughly vetted both with community residents and other academic peers, and is a much more robust tool for identifying vulnerable communities. By contrast it is unclear whether the screening methodology developed by ARB has undergone any peer review and the tool lacks the rigor necessary to effectively serve its purpose as defined by AB 32. As such the EJAC strongly recommends that ARB utilize the EJ Screening Approach developed by the EJ Research Team, with the slight modification suggested by the EJ Research Team on proximity factors. We believe that in the end, this will prove to be a more efficient and timely process and will ultimately allow the ARB to effectively fulfill the requirements and legislative intent of AB 32.

Our specific concerns regarding the proposed screening methodology are summarized in five broad areas:

1. The screening method does not include sufficient vulnerability indicators to identify those communities with the potential to experience, direct, indirect and cumulative emissions impacts related to market mechanisms.
2. The screening method fails to account for regional differences in pollution sources.
3. The screening method does not prioritize communities based on the impacts of cumulative exposure.
4. The method for identifying affected communities is confusing, lacks transparency and does not actually include many of the places that the mapping exercises identified as affected.

5. The methodology does not effectively identify communities facing disproportionate impacts from incompatible land uses or living in close proximity to hazardous facilities.

To address these concerns we offer the following suggestions:

Include a more comprehensive set of vulnerability indicators:
Our preference would be to see a methodology that includes the full suite of vulnerability indicators included in the EJ Research Team's method. At the very least we expect the ARB to include race ethnicity, home ownership, age of housing stock, language isolations, age, and access to health services. ARB's screening tool method narrowly characterizes communities based on income, which fails to accurately capture the array of communities that are, or have the potential to, be disproportionately impacted by emissions. Race is an important determinant for disproportionate impacts of environmental burdens and a part of the frame of environmental justice that should not be excluded. The U.S. E.P.A. defines Environmental Justice as, "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies."[1]

There is now a large body of research that demonstrates that other social indicators, and race and ethnicity in particular, are statistically significant indicators of increased risk and vulnerability to exposures from environmental toxins. For example, in "Still Toxic After All These Years," the EJ Research Team showed that in addition to income, demographics such as race/ethnicity, home ownership, language isolation, and land use have been shown to be statistically significant indicators of increased cancer risk or respiratory hazards in the Bay Area, showing that environmental injustice is still a reality in low-income communities and communities of color.[2] Independent of income, race was shown as a significant indicator for disproportionate location of TRI facilities/ air toxics in communities in the Bay Area in the same study. In a study on the vulnerability of communities to climate change, African Americans were more vulnerable to higher energy bills, unemployment, and the negative effectives of energy price shocks than non-Hispanic whites.[3] Similarly age is an important indicator of risk as research shows that children are more vulnerable to the long term health risks associate with toxic exposure. Recognizing that income is but one small piece of predicting a community's likelihood of being exposed to toxins, and suffering negative health consequences as a result of this exposure, the screening method should include a broader set of social vulnerability indicators.

Include regionally appropriate indicators:
While we understand the desire to create one tool that can be used universally in California, the reality is that California is a state of regions and that our regions face unique and quite different challenges. As such, EJAC recommends that a broader suite of indicators should be available to tailor to the reality of each of the State's regions. For example, given the agricultural nature of the San Joaquin Valley, it does not make sense to leave out important indicators such as pesticide use

[1] U.S. E.P.A Environmental Justice website last viewed on June 18, 2010: http://www.epa.gov/environmentaljustice/
[2] Pastor, Manuel; Jim Sadd; Rachel Morello-Frosch. 2007. *Still Toxic After All These Years*. Available for download at: http://www2.ucsc.edu/cjtc/docs/bay_final.pdf.
[3] J. Andrew Hoerner and Nia Robinson. 2008. *A Climate of Change: African Americans, Global Warming, and a Just Climate Policy for the U. S.* Available for download at: http://www.ejcc.org/

data and dairy emissions/location data. To fully understand how communities are, or are not, being disproportionately impacted by air pollution in this region, it is absolutely critical that these regionally important emissions factors be considered.

Adjust the methodology to capture cumulative impacts:

AB 32 requires the ARB to identify communities with the potential for experiencing cumulative impacts. However, the proposed screening method fails to effectively identify communities that experience cumulative emissions impacts. By ranking tracts along five air quality dimensions and then simply taking the worst of these scores to be averaged with the similarly ranked income measure[4], the screening methodology fails to capture tracts that score poorly across a variety of air quality categories. This means that a community that is ranked very poorly (a 5 for example) in one category but quite well in five others would be ranked the same as a community that ranked very poorly in all six categories. Give the explicit legislative language about considering the potential for cumulative impacts it doesn't make sense to identify impacted tracts in this way. We feel that the method of ranking impacted tracts as proposed by the EJ Research Team is a much more effective way to identify communities experiencing cumulative emissions impacts and more accurately reflects the intent of AB 32. The current work of the cumulative impacts working group convened by CALEPA, in which the ARB participates and funds, highlights not only the limitations of ARB's proposed EJ screening methodology, but also provides another example of how to capture Cumulative Impacts[5].

Eliminate the process of moving from census tracts to "communities":

The proposed screening method attempts to move from tracts to recognized communities. While we understand the desire to create of list of recognizable places, the proposed method for doing this lacks clarity and transparency and fails to accurately capture some of our state's most heavily impacted communities. Instead of doing this we would recommend that the method show a gradation of the final ranking for communities to ensure adequate protection of communities that may not be ranked the highest, but are vulnerable. For example, African Americans with higher incomes may still be at higher risk compared to other races/ ethnicities of the same income level.

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[4] In the proposed methodology health risk and exposure is determined by looking at five factors including:

1. Monitored concentrations of ozone and fine particulate matter (PM2.5)
2. Annual number of days exceeding the federal 8-hour ozone standard
3. Modeled cancer risk for diesel particulate matter
4. Cancer risk and chronic non-cancer hazard index associated with respiratory effects from air toxics, derived from the US EPA National Air Toxics Assessment (NATA)
5. U.S. EPA's Risk Screening Environmental Indicators model output for cancer and non-cancer risk indicators using data from the federal Toxics Release Inventory facility data

The individual indicators for exposure in each census tract are placed in one of ten ranks. The highest (worst) ranked indicator for each census tract is then selected. For example, some census tracts rank highest based on ozone concentrations, while others rank high based on PM2.5 levels or toxic risk. Once the highest rank for a health risk and exposure indicator is determined, it is averaged with the socio-economic rank for that census tract. Once the exposure and socio-economic indicators are combined, all of the census tracts are re-ranked based on this averaged value. Using this final ranking, the highest ranked (worst) 20 percent of the census tracts in the state is identified (taken from the ARB proposal). What this means is that a community that scores a 10 in one area and a 1 in four areas would actually be seen as having a higher risk than a community that scored a 9 in all five areas and the same as a community that scored a 10 in one area and a 9 in each of the other four areas.

[5] More information on the CalEPA Cumulative Impacts Working Groups can be found on OEHHA's website at: http://oehha.ca.gov/ej/index.html

The rankings for each indicator should be added together to form a cumulative score rather than averaged, and the results should reveal the relative rankings among communities instead of drawing a line at the highest ranked 20% and not disclosing information about the other communities. This is useful for developing policy decisions to protect such vulnerable communities, promotes transparency, and is necessary information for robust public discussions.

EJAC recommends not including a list of communities and only displaying the results of the screening in map format. There are significant discrepancies between the maps and the lists of the communities. In the San Francisco Bay Area, the Iron Triangle in Richmond is named, but the whole community is not shaded on the map. Bayview Hunters Point/ Southeast San Francisco and East Oakland are shaded on the map, but not listed. We are concerned that some environmental justice communities are not on the list or the map due to limited use of indicators, a difference in how communities identify themselves or other methodology issues. An initial list of excluded communities are: North Richmond; San Leandro; Vernon; Carson; Allensworth, which is technically a part of Earlimart's postal code, but is a separate community according to residents; Tonyville; Tooleville; Tevaston; West Goshen; and Malaga and West Fresno, which are a part of the City of Fresno. It is unclear why these communities are not included and contradicts other lists in other processes to identify heavily impacted communities. Without a corresponding map and list, it is unclear how this tool will be used in setting up regulations and implementing protections for communities identified. This was apparent at the EJAC meeting when ARB staff could not give a clear explanation of the purpose for the use of the methodology. ARB should not move forward without clarifying this for the public.

Broaden the land use analysis and include a proximity analysis:

Land use, and proximity of emitting facilities to sensitive sites are critical factors to considering and understanding the impact that pollution emissions may have in a given community. It is therefore unclear, why ARB has failed to include a robust proximity and land use analysis. While we understand that the data in these area is more complex and may be less readily available, the EJ Research Team, at the last EJAC meeting, offered clear recommendations for how the ARB can, adjust the EJ Research Teams methodology to facilitate state wide analysis. We urge the ARB to work with the EJ Research Team to accomplish this. By doing so it will ensure that the screening methodology captures sensitive populations and is able to identify pollution burdens experienced at a very local level.

In addition to these comments we would like to point out that we reiterate and support the comments submitted on behalf of the Environmental Health Coalition but not included here.

Finally, in closing, we would like to reiterate our strong recommendation that ARB utilize the EJ Screening Approach developed by the EJ Research Team. This will effectively address the concerns we've raised above and will allow the ARB to fulfill the requirements and legislative intent of AB 32. These issues are so critically important that the EJAC strongly recommends that the CARB hear a presentation from member of the EJAC and the EJ Research Team on the methodology.

Sincerely,

Angela Johnson Meszaros
Jane Williams
Co-Chairs

CC: Members, California Air Resources Board
Senate pro Tempore, Darrell Steinberg
Speaker, Assembly Member John A. Pérez